Type: Sponsored Symposium

Final Abstract Number: 04.004
Session: Transforming the Landscape of Meningococcal Disease Prevention
Date: Thursday, April 3, 2014
Time: 10:15-12:15
Room: Room 1.60

Beyond direct protection: Meningococcal vaccine effects on carriage

A. Finn

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Presenter did not provide an Abstract

http://dx.doi.org/10.1016/j.ijid.2014.03.440

Type: Sponsored Symposium

Final Abstract Number: 04.005
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Understanding parental acceptance of new vaccines

W. Fisher

Western University, London, Ontario, Canada

Presenter did not provide an Abstract

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Type: Invited Presentation

Final Abstract Number: 05.001
Session: Grand Challenges in Malaria
Date: Thursday, April 3, 2014
Time: 10:15-12:15
Room: Room 2.40

Accelerating to zero: Closing the gap in detection, cure, and transmission to achieve malaria eradication

A. Magill

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Between 2000 and 2012, malaria incidence rates were reduced by 29% globally, and by 31% in the WHO African Region. The global malaria mortality rate was reduced by 45% during the same period, while the decrease in the WHO African Region was 49%. While this progress is unprecedented, malaria still kills over 600,000 people and results in more than 200 million cases every year. While current interventions and strategies remain effective and save lives in most settings, they entail high long-term costs and are threatened by drug and insecticide resistance. New interventions and new strategies are needed for accelerating the pathway to eradication and the best way to sustain the progress gained by high level control and to prevent resurgence. Investments leading to new insights and innovations in the science of eradication and flexible delivery models can help speed the trajectory to malaria eradication by detecting and eliminating the human reservoir of infection in asymptomatic persons combined with effective and complete transmission prevention. While sustaining current gains is imperative, a new emphasis on achieving the goal of eradication is vital today.

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Type: Invited Presentation

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Session: Grand Challenges in Malaria
Date: Thursday, April 3, 2014
Time: 10:15-12:15
Room: Room 2.40

Preventing the global spread of artemesinin resistance: Can we subvert evolution?

P. Guerin

WorldWide Antimalarial Resistance Network (WWARN), Oxford, United Kingdom

In virtually all countries, *Plasmodium falciparum* malaria is treated with an ACT, a combination of artemisinin with a long acting partner drug. Antimalarial drug resistance, in particular artemisinin resistance is now confirmed in Cambodia, Thailand, Laos, Vietnam and Myanmar. If this resistance were to spread westward, and this trait becomes common in Africa, the result will be a global public health catastrophe. It would derail current control and elimination efforts and reverse achievements made in the last decade.

Historically resistance has been identified only when it rose to levels that caused many treatment failures. The "standard" reaction was to shift to the next drug, from chloroquine to sulfadoxine-pyrimethamine, for example. While this tactic was possible in the past, development of a new antimalarial, registration, change of policies, and necessary training to support a new national treatment guideline will take years if not decades. Therefore all efforts must be made to prolong the therapeutic life of the ACTs.

A very aggressive strategy will be needed to eliminate resistant parasites in the Greater Mekong region with the current tools available. It should include innovative approaches such as mass drug administration, targeted strategies on specific populations, and improvement of drug quality. This targeted strategy must be guided by up to date intelligence on clinical response and on active mapping of the spread of resistance.

Many of the antimalarial regimens have been developed and recommended for "standard patients", while in real life, a large fraction of the beneficiaries do not fit into this category. Outside the resistance zone, the underlying factors driving resistance, i.e. inadequate drug dosage, drug interaction, drug quality, pharmacological responses in particular sub-population like small infants, pregnant women, undernourished, co-infected patients must be studied and addressed now. If we want to have a chance of cheating evolution and preventing the inevitable, stakeholders must be ready to invest and rapidly adjust their strategy in the war against resistance and malaria.

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